An Introductory Overview to the Formative Years of the Kap River Nature Reserve in the Eastern Cape of South Africa: Enviro- microhistory, Microhistory, and World-ecology

Part I

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Figure 1. Entrance plaque to the Kap River Nature Reserve. C. Engelbrecht

If historians wish to justify the
resources society devotes to their
subject, modest though these are,
they should not write exclusively
for other historians.
—Eric Hobsbawm

ABSTRACT

This investigation intends to bring three fields of study (enviro- microhistory, microhistory, and world-ecology thinking) closer together by looking at their real or implied interests in the Kap River Nature Reserve and the shared benefits that can be derives from doing so.

Andrew Biro's concept of 'critical ecologies, Moore's world-ecology thinking with an in-depth critique and re-conceptualisation of capitalism, by drawing on existing wisdoms from enviro- micro history and microhistory, place a more contemporary perspective on the role of the induvial, in all of this.

The emphasis on, and frequent use of the adverb, *already,* emphasises that something has happened sooner or before what we normally take for granted. This changes the traditional interpretive preferences. The results often reflect an inertia to change, for methodological renewal, or perspective shift change.

There is more to gain from doing so than not trying at all. Things do not have to be the ways they have always been.

Key words:

already, binary, cheap nature, Covid-19, criticalness, critical ecologies, double internality, web of life, human psyche, and world-ecology thinking,

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1. Introduction

The current problems surrounding, or more correct, *stifling*, the *future existence of all life-forms on Earth*, whether they are grounded in climate change, pollution on planetary scale, human-induced species extinctions on a daily basis, or *neo*-liberal capitalist *praxis* as world-ecology, compel humans since Covid-19, to rethink 'all analytical categories in the humanities and humanistic social sciences […] [along] ways in which their practices can catalyse environmental awareness' (Osborn, *et al.,* 2019) for the betterment of humankind. This is not entirely a new call. In the mid-1940s, Max Horkheimer and Theodor Adorno (2002, xiv) wrote that 'humanity, instead of entering a truly human state, is sinking into a new kind of barbarism'.

Today, newer analytical categories such as enviro- microhistory, microhistory and world-ecology studies, offer more contemporary interpretations with practical implications for humane existence, than traditional genres of, and about historical pasts. All three categories explore different versions of the variegated pasts.

Andrew Biro's (2011) view that 'all ecologies are *critical* ecologies' and need to be understood as fragile, serves as the starting point for this study. Such understanding requires a wider and more committed awareness of enviro-microhistory, microhistory, and world-ecology studies. This view *already* points towards a complementary and interdisciplinary relationship among these categories. And this interdisciplinary*ness* enable *humanistic* social sciences (it should be *all* sciences) to avoid thinking of the environment only in terms of gathering and producing food (Boserup, in Worster, ed., 1989: 38).

Knowledge and understanding without action and application through these histories are irrelevant without their focus on the role and position of individuals' (Horkheimer, 1978: 147) real life 'experience' as agency (Boulton, 2006: 113–4, 125, 128–9; Engelbrecht, 2026). Traditionally, human experiences have always been context bound and remain relative to its specificity. This is a traditional dualistic perspective, meaning, that nature and human

experiences are categorised as separate from each other. Instead, world-ecological thinking argues in favour of a binary approach: nature is *already* in human experiences/human experiences are *already* in nature. This 'suchness' (Cohen, 2017: 18–42) of environmental concerns that alternate between conservation, sustainability, and re-use, fall short of the principle of re-useability. Sustainability and re-use have an end in sight, re-useability not – a planet built on thinking about sustainability and re-use, differs from one built on re-use*ability*.

As the debates unfold in this study, the emphasis on the role of the individual as agency while traditional blame on capitalism as a *system*, will become less prominent. In other words, a perspective shift change is proposed.

This proposal is uncomplicated: there is little wrong with capitalism as a system. Capitalism's associated problems are deeply engrained in the psyche of humans who misappropriate *their own system* which *we* baptised as capitalism, which *we* continue to implement, which *we* mismanage and exploit to impoverishing levels, and worst of all, which *we* perpetuate only to let the spoils which were meant for all of us, fall into the hands of our connected *neo*-rich or political *bawenzi* (Kamau, 2013). This results in *that* generation *nouvelle* of political elite who are captured by their own political parties. In South Africa, being captured is to enter into the underworld of dark if not fraudulent state politics. Capitalism did not invent itself, no -ism ever did. But capitalism cannot be tolerated without the individual or the individual without capitalism, both needs to be re-invented, at least in terms *of* their reciprocal interrelationships. This *'stale mate*'-position seems to test our 'cognitive limits' (Simon, 2020: v), the argument for the reciprocal relationships by histories, and *between* them.

The philosophical thinking about world-ecology thinking seems a necessary condition when debating a radically changed web-of-life-understanding. The shortest route to familiarise oneself with the web of life, is to think of the web of life as the 'biosphere' into which all life forms continue to exist. This study can only attempt to make a small contribution to world-

ecology thinking. The will and necessity is to move away from traditional false consciousnesses.

2. New consciousness: from the traditional to world-ecological thinking

The active participation by individuals in their respective intellectual communities as agencies, are required to guide their scarce research sources towards interdisciplinary research (Horkheimer, 2004: 87–109). The argument is that a certain decisive number of people achieve an awareness, and if one more person supports this new awareness, then many more follow (Keys, 1981: 17). This did not happen in the case of environmental history in South Africa because one view is that 'environmental history grew out of the Marxist social history tradition' (Carruthers in Drovers, Edgecombe and Guest, eds., 2003: 4).

Jason W. Moore's concept of a 'double internality' (2015: 3) presents such a binary opportunity: multidisciplinary approaches employed in research/research employed in multidisciplinary approaches. The role and position of the individual as agency, is one of the founding characteristics of microhistory: individuals are not just passive bystanders. This is also true for enviro- microhistory, microhistory, and world-ecology studies.

The research process (below) distinguishes between a research *approach* as a research *strategy*, and *research method* as *a specific way of interacting* with the literature for consistency.

The enviro- microhistorical approach in this investigation, is a *specific historical approach* which strategically focuses on the enviro-spacio-temporal features of the give-and-take relationships between humans and nature by a restricted scale of observation through an in-depth investigation placed in its wider context. Scale and depth of investigation are two important microhistorical characteristics. Global environmental history on one end of an imaginary time scale (Egmond and Mason, 1997, 1) is the antitheses of its scope. The most

obvious across-conceptual inclusions are space, time, interconnectedness and change. This is figuratively speaking 'the science' of real environmental and human life expressed by normative methodology. This is more than the traditional dualist distinctions of material, cultural, social, or political approaches, as Moore's (2015) the concept of web of life explains.

An enviro- microhistory approach understands the formative years of the history of the Kap River Nature Reserve (KRNR) which shows that this small nature reserve is not exempted from influences (natural and non-natural) and consequences of climate change, pollution, human induced species extinctions, or *neo*-liberal capitalist *praxes*. Regardless of its size, this reserve is *already* entitled to the same treatment as mega nature reserves or so-called 'important reserves' are. In this study, it does not only refer to financial investment but also investment of human capital. All reserves are by nature *critical ecologies*; thus they are of a *specific kind*: and *alive* in a specific sense, because of the specificity of their contexts as this photo below shows.

Figure 2. Various ecosystems in context at the Kap River Nature Reserve C. Engelbrecht, 18 November 2019

Their critical*ness* does not stop at being critically neglected, because they carry support for and produce critically important life-creating spaces for *critical* species. In this way their criticalness do not turn on, in the first place, that they might well be critically endangered, but rather on their critical contribution as part to *critical* life-making. Of course,

> Once extinct the complexity of a species, its potential for enriching the lives of other plants and animals and humanity cannot be recreated and is lost for all time (Everard, 1985:1).

From the above it is clear that we need to know, understand, be cognisant of, and comprehend our relationships with the total biosphere on which the futures depend (Dasmann, 1989; 279). If all ecologies are seen as critical, then having a consequential view rather than a pro-active approach about its *neo*-conservation (Engelbrecht, 2017: 1–4) will not solve the problem of past-event intervention. While one can treat a critical ecology in a reactive manner, normative approaches yield more productive results. It is not illogic to apply normative considerations, because according to Moore's concept of 'double internality', humans are not separate from ecologies as if they can act on ecologies at any time in future only when it suits and pleases them or even after the event. A reasonable person's test points towards the reality that humans have choices and are seldom mere spectators. Ecologies are not separate from humans as if humans are merely dragged along or pushed around in ecological spaces. In fact, *ecologies are already actors* in their own right. Humans are *already* part of critical ecologies/critical ecologies are *already* part of humans. All humans live with the human condition of its criticalness. Critical ecologies *already* exist within and are already next to and not separate from all other ecologies, as for example, *capitalism as world-ecology* is. It has a specific characteristic, namely, the capitalist one. The KRNR experiences this first-hand.

These first draft pages were written during the first months after the Coronavirus pandemic. The spread of the virus *specifically showed how critical and vulnerable all ecologies*

are, and always have been, including for haute capitalism as world-ecology. Covid-19 does not stand separate from an enviro- microhistory of the KRNR.

For several reasons, human struggles against Covid-19 are based on the competition for the authoritative allocation of scarce resources. By March 2020, many infected people across the world were dying in large numbers in a short time as a direct result of insufficient scarce medical resources. This is not the capitalist system's fault, but rather the shortcomings of humans' inability to manage their self-adopted system. First-World medical personnel had to decide who should live or not, simply because of the shortage of medical equipment. The reality is that official government public statements and official reports testified to this sad reality. This is not a positive testimony for capitalism as a world-ecology or for the neglect of the KRNR. Coronavirus deaths and KRNR conservation neglect, are interrelated because the flow of scarce resource allocation to one and depriving the other. The managers of the KRNR treat it as cheap nature, therefore *cheapening* it as if the reserve is environmentally unworthy in their eyes in the bigger scheme (such as resource allocation) of the web of life.

To brush stroke (for introductory purposes) the terms 'critical ecologies' (which were already delt with above), 'Cheap Nature' and the 'web of life' are precisely of value because they are important for the rest of this research for (at least) the following three reasons: Firstly, already a few years ago, Moore (2015: ix, emphasis added) invited a debate and analysis about politics and humans' place in nature and how it shapes our views of histories as Worster did in the mid-1980s.

For decades humans have not achieved our own world-wide health, let alone climate change, including world peace goals, that we set for ourselves, neither in the Middle East, in Ukraine or elsewhere. Instead, a few individuals are dragging the rest of the world across all kinds of critical ecologies of our *only oikeios*. Secondly, Moore (2015: 5) continues that a new vocabulary is needed to describe the relation between humans in the web of life. Thirdly, for

E.O. Wilson (in Odum and Barrett, 2010: xiii) ecology is the discipline that addresses the complex from the top-down biological organisation. Wilson's uncomplicated view is that ecology studies which are critical for world-ecology understanding, reveal how organisms interact with one another as biotic and abiotic factors including that of their shared physical environments. While we cannot escape this, we could manage or interrelate*dness* better.

From these three definitions, two observations stand out: the hierarchal levels of organisation do not only mean that they are vertically arranged in a sequential ranking order, but rather to horizontal relations *between* living organisations – and with regards the second observation – also that of non-living ecologies. There are reciprocal relationships of causes and affects between organisms on the environment, and in turn of the environment on organisms. Some argue that everything is related to everything else, but for others, everything is related to something. In addition, J-P. Ghobrial (2014) made compelling observations about connectedness and everywhereness in his study about Elias of Babylon and global history (Engelbrecht, 2026: 1–57).

This traditional binary receives an expanded attention from the world-ecology perspective. What is more disconcerting is Hughes' (1987) view that human sciences tend to adjust their language only after times of crises. One cannot simply blame politicians, governments, or the medical research institutions for the uneven allocation of scarce resources, 'humanistic sciences', or capitalism. Behind this narrative are individuals with agency in the world of critical ecologies, and Biro's views support this. In contrast, Moore's new way of philosophising about the world ecological transcends (and not negate) Biro's characterisation that all are critical.

The second concept is *the web of life*. Within this web of life is world-ecology: it is not the ecology of the world in the traditional sense of the word. Traditional ecology views are not the traditional ecology equitable with traditional conceptions of Nature that we were used to.

In the new world-ecological thinking, ecology is the ecology of the *oikeios*. Moore (2016, 79) defines *oikeios*: as 'that creative, generative, and multilayered relation of life-making, of species and environments.' Species and environments are the result of life-making in a binary way for species make environments and environments make species. This philosophical position shapes historical method in the following way: human activity is already environment-making, and somewhere humans are making human organisations, and human organisations that are environment-making, processes and projects. The web of life shapes these human organisations.

The third concept of the traditional application is that *cheap nature* is land in inexpensive and it can be expropriated without compensation. Land-grab initiatives and illegal squatting are the most extreme forms of cheapening land and nature. They are of low value because it is not considered as a high-priority piece of land that yields high return on investments in a short time, through low resource investments levels. From economic and financial perspectives, it is not prime property and is assumed to be less deserving of management time, and resources – the investment ratio is too high and the time scale for high-return resell too long. Worldwide declining value and increased neglect leads to pollution, overpopulation, health risks and degradation on every square meter, leading to a critical ecology. Cheap nature is a perceived bargain if you can get it. The main philosophical misconception is the belief in humankind and nature/environment, as two separate 'ingredients'. Cheapened is the process that took place, and cheapening is the present ongoing proses of a set of strategies to control a web of life, of the 'things' people make. Capitalism is thus the way of making life to mobilise nature through a low-cost operation. In this process capitalism destroys nature as a byproduct because it puts nature and everybody to work as cheap as possible, often for free. Capitalism makes the world through other 'things' that come from within nature to make nature as a 'thing' from fellow humans' and animal work.

To prevent confusion, I take, with respect (and credit to) the following wisdoms form Raj Patel and Jason W. Moore (2017, 22) to best outline cheapness:

> [I]t's a set of strategies to manage relations between capitalism and the web of life by temporarily fixing capitalism's crises.
> Cheap is not the same as low cost […]
> Cheap is a strategy, a practice, as violence that mobilizes all kinds of work-human and animal, botanical and geological-with as little compensation as possible.
> We use cheap to talk about the process through which capitalism transmutes these denominated relationships of life into circuits of production and consumption.…
> Cheapening marks the transition from uncounted relations of life making to the lowest possible dollar value. [….]

Moore (2015: 3) described capitalism as a world-ecology, using capital, in the quest for power, to overcome the limits of capitalism today. For Moore (2015: 2, emphasis added), '[c]apitalism is not an economic system; it is not a social system; it is *a way of organizing nature*.' Capitalism is the current world-system organising nature – good, bad or indifferent. When- and where-ever capitalism organises nature, it puts nature to work, putting itself (capitalism) in the service of itself, and controlled by its own controlling cohorts. Capitalism as world-ecology, is neither the ecology of the world, nor of Nature.

To interject, the enviro-microhistorical investigation will reveal much of the opportunities and shortcomings alluded to in this discussion to actively make fundamental mind-shift changes. One of the problems is that the speed at which humans produce, accumulate and store to archive, or save to delete knowledge, is so staggering that we seem not able to acquire wisdom in time to deal with and benefit from the earlier acquired knowledge. Max Horkheimer (1978: 17) described this as a 'false consciousness.'

The implication is that capitalism remains a *specific critical ecology*, a *world-ecology next to all other critical ecologies*. This example of knowledge that has not translated into wisdom (Maxwell, 1988) is because we perpetuate and prop up capitalism in its present form, that we have not made the mind-shift changes. This is an epistemological issue. Seen in this

way, capitalism is neither separate from nature, nor from biological ecologies, the civil construction industry, or any other form of traditional thinking of everyday spaces around us. Instead, capitalism exists next to, for e.g. fresh-water ecologies, concrete built-ecologies or the dust on the moon-ecology. Capitalism is not simply capital plus a specific ecology, but rather capital-in-ecology, and ecology-in-capital, and not capital in nature as if nature exists separately from humans, or vice versa. Capitalism as a world-ecology is as critical and suspectable to threats to its life-expectancy, as any other ecology would struggle for its own survival and progress. This makes capitalism as world-ecology to be as adaptive, adapting, transformative and transforming, as any other critical ecology finds itself in their respective struggles for survival.

The implication that capitalism as world-ecology *is critical and fragile* that its continued existence is under constant and intense intellectual and on-the-ground, or from bottom-up, reviews or resistance. Whilst some philosophers argue that capitalism's end is near, *endists* face others who argue that capitalism is by now probably one of the oldest -isms, and therefore used to robust adaptations, transformations, and mutations that has been around for almost a thousand years. Current capitalism is therefore the only one we have, and not the best by any measure, with no alternative at present.

Moore (2015: 1, emphasis added) suggests that *neo*-liberal capitalism today faces the 'inevitable onset of [a] terminal crisis' of epochal proportions because of 'the breakdown of the *strategies* and *relations* that have sustained capital accumulation over the past five centuries.' This is (Moore 2015: 3) 'the "triple crisis" of food, energy, and finance […] [and] climate.' So, when capitalism's 'structures of knowledge, its dominant relations of power, re/production, and wealth, and its patterns of environment-making' fail, then capitalism's limitations are continuously exposed. One such limitation is that of the 'capitalization of reproduction' (Moore 2015: 49). This capitalisation is the result of the need to be able to have

short gains of labour consumption because labour turns on either being unpaid or lowly paid. Therefore, if the commodity frontiers (also of labour) cannot be extended faster and further than the zone of commodification, then profits are compromised. As a result, without '[s]ignificant enlargements in the zone of appropriation […] capitalism's crises by simultaneously reducing the value composition' (Moore 2015: 73) exposes the shortcomings of capital/ism. One such limit is the question of value. This brings the discussion to the question of Cheap Nature and is of direct importance to the KRNR. Behind the conservation interests of the proposed, lurked the interest of political economics of the land for private property rights – nature on the one hand and capital on the other.

A key characteristic of capitalism is its extractive accumulation strategy, but it is also a key vulnerability. Capital accumulation means amongst other things, the extraction of taxes from society. Money needs to be prudently managed. The history of such failures are replete with examples of the thin line between mismanagement and fraud and corruption. In other words, there is a conscious want to misappropriate taxes and a need to 'balance the books.' It is based amongst other variables, also on Cheap Nature. Moore (2016: 2–3) explains:

> For capitalism, nature is "cheap" in a double sense: to make Nature's elements "cheap" in price; and also to *cheapen*, to degrade or to render inferior in an ethico-political sense, the better [it is] to make Nature cheap in price.

The only problem is, in Moore's words (2016: 11) that 'nature is never cheap.' It means that nature cannot be 'cheap' in monetary terms. Since only one nature exists, it makes nature priceless, not cheap, but rather so expensive that it is unaffordable in monetary terms. And if this is unaffordable, the 'value' of nature is so far out of monetary reach that we cannot put a price tag on nature, and if it does not have a price nature has no value. And when it does not have a value, then it leaves capital's -ism – capitalism – without any value in a philosophical sense of the word. Marx (1983: 44) explained this as follows: if exchange-value cannot be

replaced ‘by each other, or equal to each other’, then, it is ‘cheap’ in the cheapened, degraded and rendered inferior sense of the word.

Biro’s view (2011) that all ecologies are critical ecologies, is precisely because of three paradoxes: ‘(1)…that the human species itself has become increasingly powerful but at the same time increasingly vulnerable, (2) that the paradox of a ‘human species as a whole […] [but with] enormous divisions that overlay our common humanity’ still dominate, and (3) that ‘environmentalism as a movement seems incapable of mobilizing more than anaemic, and often individualized, response.’

If all ecologies are critical ecologies and since we have only one common non-human environment, then all sciences are inextricably linked to this single environment for the survival of all ecologies. Or so it seems. There is no single non-human environment that also includes humans, instead, there is, Moore reminds us, it is the only one environment *already including humans*. Whilst it is true, and not to be expected, that not all scientific endeavours make environmental issues their direct focus of study, none of them are separate from an inextricably interwovenness with what Moore (2015) calls ‘the web of life’. Moore terms this principle of inextricable interwovenness in the web of life, ‘double internality’, which has also been applied in this article as follows: all sciences-in-the-web-of-life/the web-of-life-in-all-sciences. An overriding view herein is that all sciences, including enviro- microhistory, can, and *should*, contribute towards the *praxis* of science-into-policy principle (Pandor in Mambo and Faccer, 2017: i). This implies both normative and empirical commitments because alternatively, what would really be the sense of knowledge for its own sake? In view of Covid-19’s historical legacy, early indications are that humans have not reached *that* level of insight into its existence – for now, we merely want to survive. But merely surviving, hardly sets the bar of human existence expectations, or better, for all life-forms, higher than the lowest tiers of Maslow’s hierarchy of needs.

3. Setting the physical scene for the Kap River Nature Reserve

In the South African context, one should be mindful of the following empirical mega-data (to name only a few): almost 50% of more than 1 000 species recently surveyed, are considered as threatened; 31% of ecosystems are not protected; almost 3 000 of 20 500 plant species are threatened; 360 of about 3 000 mammal species, bird, reptiles, amphibians, freshwater fish, butterfly and dragonfly species, including selected estuarine fish and invertebrates studied, face possible extinction; 40% of flora and fauna species are not protected, and lastly, in the last four decades southern Africa recorded nearly 500 climatic disasters that disrupted the lives of 140 million people of the region (Walters, 2019). A micro-scale example in the case of the KRNR, is a small white flower *Kappia lobulata*, that is endemic to this area. These make the reserve an important habitat in the context of critical ecology of the KRNR and raises a big historical question in its own right: What species must be saved, and which must be left to die out?

If we also consider that the South African climate is made up of a wide variety of weather phenomena, from Highveld thunderstorms, frontal rainfall over the south-western Cape, berg wind conditions, winter frost and snow, to tropical cyclones, then it is no surprise that extreme weather conditions (e.g. flash floods and severe droughts) are integral to South Africa's local weather experiences and expectations (Landman *et al.,* in Mambo and Faccer, 2017: 7, 9) where they matter most. For instance, Julia Mambo (in Mambo and Faccer, 2017: v,) is of the view that '[t]he frequency of extreme weather events has increased, as shown by the increased frequency of the El Niño (from 20 to 10 years)'.

Similarly, Claire Davis *et al.,* (in Mambo and Faccer, 2017: 14–25) recently summarized aspects of future climate change in Southern Africa. Some findings are decrease in rainfall over central and western parts of southern Africa during summer and autumn months; increases in rainfall further north over east Africa; rainfall decreases over most of

southern Africa during spring and south-west Africa during winter months; increase in mean, minimum and maximum temperature, and increases in extreme weather events such as the amount of very hot days and heatwaves. Ziervogel *et al.,* (2014) are of the view that climate change has a huge impact on South Africa. The mean yearly temperatures increased at least 1,5 times while the global average observed over the last five decades, is 0,65 ˚C. In addition, the rainfall frequency increased. These changes seem likely to continue.

The intended purpose of this study is to catalyse environmental awareness and to combine the wisdoms of microhistory with that of the Anthropocene/Capitalocene world-ecology debates, into an enviro- microhistory of the KRNR that is situated along the southeast coast of South Africa. By combining the best epistemological and historiographical practices from interdisciplinary research, one might arrive at an acceptable research output of the history of the environment form an enviro- microhistory *approach* of this reserve. The rich and under-researched field of enviro- microhistorical investigation is that of vulnerability and adaptation to climate change, of plans and animals and not only for humans. A vast set of useful information exists in microstudies of the history of the environment. Mambo (in Mambo and Faccer, 2017: 4) refers to a variety of analytical tools that can be used: e.g. indicator-based methods, GIS-based methods, multi-stressor approaches, and participatory methods. Enviro-microhistory can benefit from such insights.

The questions remain: Is *any* history, but specifically that of the KRNR (33˚ 30 S and 27˚ 9 E) (Cloete and Lubke, 1999: 139), feasible and if so, will it be of any value since this is a small reserve covering merely 670 ha in size. Will an *enviro*- microhistory be more productive because it deals with the environment in the web of life? Others would argue that in view of the rise of *microhistory* over the last approximately fifty years, would *that* not rather be the right analytical approach? In combining these questions, would a *microhistory* of anything that

is already small, be sensible from any angle? The answer is highlighted in an enviro-microhistory of the KRNR.

To the above questions Biro already gave a workable short answer: ‘All ecologies are critical ecologies’ (as repeated many times above). The characteristic of criticality is already in the KRNR and cryptic comments about extreme rainfall events (EREs) at the KRNR, will testify to this. Without rain there can be no meaningful KRNR. The point of discussion is not what the lack of rain does to the KRNR, but the lack of resources the authorities invest in the reserve to mitigate aspects of criticalness at the extreme poles of an imaginary linear with extreme rainfall in the one end and extreme drought at the other. This is also the case in view of Moore’s capitalism as a world-ecology global conversation. The apparent demise of capitalism is not the focus in this study.

An earlier study (Giralt *et al.,* 2002: 1) about closed lakes in arid and semi-arid environments, have shown that these types of environments are sensitive to small changes in climate and can cause dramatic changes within the lakes therefore life forms of a wide variety. Similar views about South African estuaries exist. Based on earlier research outcomes (Worster, 1989: 17) elsewhere, the question arises: How sensitive is the KRNR to climatic change? The reserve is only thirty-five years old, and which climatic changes are referred to? These questions alone make the reserve deserving of the authoritative allocation of scarce resources – including research resources – in the same way that all other life-forms share similar sentiments or face the same resource-strapped realities on Earth’s web of life. The best one can do is to contribute in a modest way to the global conversation and understanding of this study.

There is an almost forgotten theme that is of relevance here: that of the use and influence of macro-photography in relation to enviro- microhistory of the KRNR. People travel frequently through the KRNR capturing photographic images of subjects of interest. Because

there are many small (and large) objects of enviro- microhistorical interest and importance worth photographing from an extreme close-up distance could be useful in the writing of any enviro-history effort. Flora and fauna examples testifies to this. Macro-photography reveals – just as enviro- microhistory does – what would normally have been unknown. This makes photography an important tool in the study of enviro- microhistory because it changes human perspectives and bring the unknows to the fore. Since the advent of Digital Single Lens Reflex (DSLR) cameras in the 1990s, and the inclusion of the DSLR camera in mobile phones, the world is now characterized by 'ubiquitous photography' – from 'print-oriented to a transmission-orientated, screen-based experience' (Rubinstein and Sluis, 2008: 9), that leads to a culture of digital oversharing in the public and private domains, alike.

There is an interesting and neglected angle to this: all climates have always been and will continue to change. Subsequently, climate change has been happening for millions of years. What we study today, will in future be different from immediate and long-gone environmental pasts as we know them today. Follow-up studies are already necessary and will become more urgent as future needs bring into line previous research outcomes to their research agendas. This makes revisionism a constant or controlled variable in environmental studies. Photography in general, but macro-photography in particular, play an important role to capture such changed climatic outcomes in relation to prior research results. The empirical value for comparative studies, is the to establish benchmarks for re-evaluation. Photographic images are important sources for research methodology, for proof, verification, substantiation, saving, archiving and instant retrieval or play-back.

Interestingly it is 'not necessary to go to other geological periods in order to discover great changes in nature' (Utterström in Worster, 1989: 39). From a scientific perspective, the rate of climate change today, is so profound that vastly shorter periods of geological time, will go a long way to provide evidence for whatever we want but need must-have data for that

purpose. Thus, is researching the enviro- microhistory of the KRNR a nice-to-have, a must-have, or an undertaking only for the sake of it?

But to be aware and compelled to act about the abovementioned South African environmental mega-data, is not self-inspiring on its own. To reveal aspects of a degraded environmental condition through photography for instance, is one option. Similarly, drone technology takes us to new heights and open new perspectives. Action – meaning application or implementation of mitigating requirements – is quite another.

In the *2016 World Social Science Report*, Director-general of UNESCO, Irana Bokova (2016: 3) made the point about research and policy implementation as follows:

> […] knowledge alone is not enough. The challenge is to improve the connection between what we know and how we act: to mobilize the knowledge of the social and human sciences to inform policies underpin decisions and enable wise and transparent management […] for this political will is needed […] [because] reducing inequalities is everyone's concern (emphasis added).

Anderson (n.d.) commented correctly that Magnússon and Ólafsson's book (2017), *Minor Knowledge and Microhistory. Manuscript Culture in the Nineteenth Century*, 'could particularly interest scholars of literacy, philology, historiography, bibliography, and more' and has a profound influence on this article. The optimism of (Szijártó in Magnússon and Szijártó (2013: 7) who see microhistory 'as one that has a bright future', making a great 'contribution to modern scholarship' (Magnússon and Ólafsson, 2017: 216, 4) also for enviro-microhistory. It remains a productive and positive line of thinking.

The proposition is that it is not the perspective or approach that is the overriding consideration for research relevance on their own, but the interplay between perspective or approach with the outcomes of research endeavour. This is in line with Bolova's earlier view. There are practical considerations on at least two levels: to be implementable, and that sustainably be kept in place. For these reasons, there need to be no tension between enviro-

microhistory or global environmental history. Scholars today realize that the global is not merely practised at the largest scales of analysis (Gwinn, 2016: 418).

Not all scholars agree. Some might even ask if placing enviro- microhistory and world-ecology in the same sentence, do not lead to intellectual confusion? On the contrary: A.J. Mills (2017: 18–26) reviewed the potential if microhistory to respond to requests that the critical approaches thereof, be applied to historiography in management and organization studies and concluded that it was indeed beneficial. This shows that microhistory's applicability is much wider from what was originally considered during the founding mid-1970s period. Consequently, Florike Egmond and Peter Mason (1997: xi) questioned if microhistory is inevitably confined to the local, the specific, or even the marginal. Today the answer is on the bookshelves of booksellers. Over the last four of five decades, the world has move on, and so must traditional definitions. As a reminder

> social sciences have tended to re-examine their philosophical foundations only during periods of crisis: periods when familiar and trusted methods no longer seem to justify the faith originally invested in them, when researchers lose confidence in the significance of their findings, and when obvious and taken-for-granted principles no longer seem quite so clear cut' (Hughes, 1987: 1).

Alison Williams (2020) quoted David Attenborough that '[t]he moment of crisis has come – we can no longer prevaricate.' This is not new and the literature is full of end-ist theories and multi-scale predictions that in many instances never came true.

Marco P.V. Franco (2018: 262–274) made a convincing case for the epistemological and historiographical insights derived from the gains of microhistory and that of enviro-history and so advancing the *praxis* of enviro- microhistory (Engelbrecht, 2018). Franco also argued for these efforts to be complementary and not to discard existing knowledge and wisdoms where there are any. A further argument is that an additional research approach could also be making contributions towards enviro- microhistory, and the likelihood to look at micro-environmental history, is not impossible. It must be stated that to advance a micro-

environmental history approach, is not to oppose any other academic work or fields of specialization but rather be complementary to existing knowledge as a specific historical approach (Szijártó, 2018: 917, 925). Having its own methodologies, clearly derived from its senior disciplines – being microhistory, and environmental history, links back to calls for interdisciplinary collaboration. Initially, such work can be experimental but do not equate to experimental history. It does not apply, as experimental history does, to 'openly fictive text built into the narrative' or the use of 'deliberate juxtaposition or real and fictitious elements' (Szijártó in Magnússon and Szijártó, 2013: 70). Productive thinking about micro- envirohistory is not the focus herein, but merely a suggestion for further investigation.

The problem is compounded in two more ways: the current state of the non-human world is such that we must take note of the global conversation – from a world-ecology perspective and its focus on the concept of Cheap Nature as developed by Moore (2015 and 2016). The challenge is to incorporate the relevance for the understanding of an enviro-microhistory of the KRNR. The second problem is that there is no existing written history of the KRNR. This means that the last word about what constitutes its enviro- microhistory has not been spoken. Something that seems not an unfamiliar critique as microhistory had to endure this over the last five decades. Simon's view that a new philosophy of history must 'have the dual task of searching for life outside language while remaining in the realm of aesthetics' (2013: 183) points to avenues for further investigation.

4. Three histories close to each other

Before most of the publications cited thus far in this research were published, Anna-Maija Castrén, Markku Lonkila and Matti Peltonen (2004: 7) wrote that it has become common for academics of various disciplines to study history and society from a micro perspective because it presents the opportunity 'to formulate many of the basic presuppositions of their research in

new ways.' This has recently been confirmed by Sarah Lee (2025) in her interesting and practical Blog about, what she calls a 'microhistorical lens' to study historical change and cultural transformations. What is far-reachingly interesting, is her emphasis on how microhistory (and I include enviro- microhistory) can *actively seek out historical contexts* for specific investigation, ranging from economic and social transformation to cultural and intellectual developments of a particular community. Much as many commentators before her, Lee, reiterates the well-known narrative of focus on minutiae aspects in everyday life brough out by a detailed understanding of, and that new insights into the complexities of historical events, unsettle traditional historical practices. To be more specific, already in the 1990s commentators referred to the simultaneous development of social and cultural microhistories with the result that two different kinds of historians have coexisted (Cerutti, 2004: 17). These sources show no references to enviro- microhistory, even as a latecomer to the rise of microhistory despite that by 2017 it has developed its own several different definitions and interpretations even though they are partly contradictory in nature (Szijártó, 2017: 194). The above confirms that microhistory

> has a clear advantage over macro-oriented traditional social history owing to its four characteristics: it is appealing to the general public, it is realistic, it conveys personal experience and whatever it has in its focus, the lines branching out from this reach very far (Szijártó, 2002: 209).

In a recent South African publication, Jacklyn Cock's *Writing the Ancestral River* highlights that studying the environmental history of a small river (in her case, of the Kowie River, Port Alfred, South Africa), can certainly lead to asking 'big questions'. Questions about British colonization of the Eastern Cape; the violent dispossession of indigenous Xhosa land (and others indigenous cultures); the emergence of settler capitalism; serious environmental degradation in the name of 'development'; and themes of social and environmental injustice

– are all issues that are not too far removed from eco- and genocide, which were focus areas for Cock's book. Many of the above variables also resonate in the case of the KRNR.

Cock employed microhistorical theory and methods making her book a suitable resource for microhistorical study. But in her own words, this is 'a love story disguised as social and environmental history' (Cock, 2018: 5). The book shows how the Kowie River is connected to wider social, political, economic and "macro-ecological problems" (Cock, 2018: 9; Engelbrecht, 2018; Engelbrecht, 2017).

From an environmental perspective, the reversal of global pollution, for example (as is the case with charity), begins at home – it requires an act of doing what is right. In line with Bokova's view, everyone must implement their research information. If we start to deal with micro-conservation practises at home such as the suburban garden, the collective benefits of smart-conservation *praxis*, are far-reaching and is a cornerstone characteristic borrowed from microhistory. Recognizing that 'history does not end at national borders [but that] people, ideas, products, knowledge, and technology move beyond and through' them (Krepp and Moreli, 2017: 28), can be productive to both enviro- microhistory and macrophotography. Because just as one cannot relate to national history without reference to the regional or global, enviro- microhistory and macrophotography history cannot be confined to human-made borders that exist within a larger context. This context is the capitalist world-ecology in the web of life in which everything is connected. The closeness between nature and humans are irreversibly reflected in art history through images that show that ancient civilisations learnt from animal behaviour, in turn, animals learnt from humans. This supports the binary-approach of nature in humans/humans in nature in the web of life from a different perspective. Worster (1989: 294) illustrates this complexity and its influence on environmental studies, along the following lines:

> '[…] since Charles Darwin, ecology has been concerned with past as well as present interactions; it has been integral to the study of evolution. Equally

> significant, ecology is at the heart concerned with the origins, dispersal, and organisation of all plant life. Plants form by far the major portion of the earth's biomass. All through history people have depended critically on them for food, medicine, building materials, hunting habitat, and a buffer against the rest of nature. Far more often than not, plants have been humans' allies in the struggle to survive and thrive. Therefore, where people and vegetation come together more issues in environmental history cluster than anywhere else. Take away plant ecology and environmental history loses its foundation, its coherence, its first step.

The history of enviro- microhistories and macrophotography history, deal with different pasts, presents and futures in the context of socio-economic (and other) relations that cut across spacio-temporal realities. Both have practical intent, and both contribute to society, as society contributes to both. And the way we think about the past, present and future, is central to our interpretation of societies past and future. From a microhistorical perspective, S.G. Magnússon (2011: 11) outlined this as follows:

> Individuals in all societies live by particular rules and laws and are expected to go along with prespecified ideas on behaviour that tradition has shaped from generation to generation. But inside every individual there are longings and desires that pull in different directions and each and every one of us perceives his possibilities in different ways, often in opposition to received traditions, new current, and the precepts of society. In other words, the way society works calls up different responses in each individual and as a result the paths that people choose for themselves often do directly counter the paths they are supposed to take.

Magnússon's view that individuals, their ideas and ideals, behaviour and traditions (and many more) are objects of microhistorical study, resonate well with photography in general but particularly for macrophotography. Photographs and manuscripts are private memories in an instant of experiences and impressions from, and about the environment, that, upon scrutiny, allow, but at the same time restrict re-interpretation of the past, present and future in different ways. Macrophotography history exposes people, their ideas and ideals, behaviours and traditions in its opposition to traditional unsustainable *praxis* that relate to the environment. Just like enviro- microhistory, the macrophotograph is obliged to the 'fixing of a frozen unchanging image of the past that is absorbed in the present' and both 'tells the little stories

that are part of the big story' (Sigurðardóttir, n.d.: 3). This implies that both are focussing on specific events to reveal the new, and both can unexpectedly shine light on the bigger picture of what humans do and should not continue to do on and to the environment. Both deal with fragments of lived experiences, and perceived possibilities to make things clear in diverse ways where language tends fail to put the past into appropriate words.

When Bokova (2016: 3) reports that '[t]he world is converging around high levels of inequality', then such converging is the result of high levels of unequal accumulation and dispersal of capital accumulation. Enviro- microhistory and macrophotography should pay attention to the view that 'too many studies are too narrow in focus' (Bokova, 2016: 4). This is because world-wide inequalities that result from the practice of silo-science extend much further than representing mere income inequalities or poverty inequalities. Inequalities should include economic, social, cultural, political, environmental, spatial, gender, and knowledge inequalities (Caillods and Denis, 2016: 22) as traditional senses of the word. Françoise Caillods and Mathieu Denis (2016: 19) report that '[t]oday, South Africa has the world's highest income inequality, despite a decrease in recent years'. This is where enviro- microhistory becomes relevant and macrophotography similarly contributes productively to expose and communicate ingrained malpractices and consequences of gross inequalities. The traditional Human/Nature dual relationship is far more complex than is suggested thus far in the above few sentences, as we will see below. The world-ecology debate can prompt us to widen our perspectives.

Because inequalities are complex multi-layered and built up over time, addressing them, is a shared responsibility (Bokova, 2016: 3). Reducing these inequalities is a requirement and plays a role in achieving major global goals including environmental sustainability (Leach *et al.,* 2016: 26). Inequalities and environmental sustainability are interwoven realities from which enviro- microhistory and macrophotography cannot escape. The dialectical relationship between environmental inequalities, knowledge inequalities and access to natural resources,

also leads to relative deprivation as well as to in- and unjust discrimination (Justino and Martorano, 2016: 38). Because these often result in environmental inequalities and habitat destruction, they become the concern of everyone to act upon. The interwovenness of inequalities and environmental sustainability should be interpreted against the background of Moore's double-internality principle: inequality-in-the-environment/the-environment-in-inequality. Inequality is not something separate from the environment, and the environment does not stand separate from inequality. Instead, the environment and inequality are already one inter-woven unit in the web of life characterized by capitalism as world-ecology, because that is the system. Thus, capitalism as world-ecology stands in an exploitive relationship contra all other ecologies.

Although South Africans over the last two decades became less poor, the society became more unequal. This is the result of the African National Congress (ANC) that developed a new Black elite through a programme of Black Economic Empowerment as a predetermined strategy. This redirect capital accumulation to build an economic elite that is loyal to the ANC. As a result, the seamless relationship between economic state-power and political state-influence have created new patterns of everyday lives in the country (Gaventa and Runciman, 2016: 71) that resulted in *neo*-poor, *neo*-unequals and a new under-class of *neo*-discriminatedness against Others.

These actions are at the expense of the environment. The lack of service delivery, state capture, and fraud and corruption (to mention only a few) prevail and they cannot be argued away. Associated socio-economic evils become a double-edged sword. On the one hand the citizenry is deprived of services and scarce resources, and on the other hand, environmental degradation also makes the front pages for the world to see (Engelbrecht, 2018). When such inequalities continue to exist, research equalities are hampered to do justice to the betterment

of life since it compromises various other dimensions of inequality in the quest ‘to leave no one behind.’ In this process, environmental historical sciences suffer.

This sounds moralistic – and it is – because it is the nature of this discussion. It is argued here, that in its logical conclusion, all written and photographic work, is after all, intended to influence its recipients. From Leach’s perspective (2016; 31) more and more politicians and citizens now realise that inequality is intricately linked to issues such as climate change, development, conflict, and health. This calls for a more active form of social science that not only studies inequality but also helps to drive social and environmental justice as supports those working for change, including how we study the pasts.

It is surreal that humans are the planet’s biggest single most perpetrating force of the extinction of life. Until recently, we did not see nor acknowledge such; and it is inspiring that although it is too late to reverse these trends, there are encouraging examples of near-extinction reversal. Enviro- microhistorical literature and macrophotography, can testify thereto. The historical fact, however, that remains the mega-states’ most destructive environment, is its enslavement to planet-wide misappropriation of the capitalist system.

Conclusion

Today microhistory no longer focuses on the 14th to 16th (or earlier) centuries and shows signs of becoming a hybrid discipline with an epistemological status of its own amongst other histories. As Juan Antonio Quirós Castillo (2024: 1) identified in archaeology, that a parallel can be drawn between the microhistory’s need to understand the functioning of past societies and the social and heritage dimensions of materialities through a scholarly language of its own.

But it is the shared interests and experiences of enviro- microhistory, microhistory and world-ecology studies, each in its own way, already in the natural environments, cultural,

social and capitalist way of worldmaking, that benefit from their all-already-togetherness binary perspective, that seem more surprising and obvious, than recognised before.

Since everything is already all connected, make these three humanities with their interests also in the past historical perspectives, already interested in the case of the Kap River Nature Reserve. And it does not matter from what angle one looks at it in die web of life; their similarities outweigh their differences.

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References

Archer, E.R.M., W. Landman, M. Tadross, J. Malherbe, H. Weepener, P. Maluleke, and F. Murrumba. 2017. 'Understanding the Evolution of the 2014-2016 Summer Rainfall Seasons in Southern Africa: Key Lessons'. *Climate Risk Management*. 16 (C). http://dx.doi.org/10.1016/j.crm.2017.03.006DOI:10.1016/j.crm.2017.03.006. Accessed 12 April 2026.

Biro, A., ed., 2011. *Critical Ecologies. The Frankfurt School and Contemporary Environmental Crises.* (Toronto, Buffalo and London: University of Toronto Press).

Bokova, I. 2016. Introduction and Key Messages. 'Social Science Challenges and Inequalities', *2016 World Social Science Report. Challenging Inequalities: Pathways to a Just World*. (Paris: United Nations Educational, Scientific and Cultural Organization), https://www.unesco.org/open-access/terms-use-ccbysa-en. Accessed 14 April 2026.

Boserup, E. 1989. 'Environment, Population, and Technology in Primitive Societies', in D. Worster, ed., 1989. *The Ends of the Earth. Perspectives on Environmental History.* Cambridge, New York: Cambridge University Press, Chester, Melbourne, Sydney).

Boulton, J. 2007. 'Microhistory in Early Modern London: John Bedford (1601-1677)', in *Continuity and Change*, 22 (1), 113–141, doi:10.1017/S0268416006006163. Accessed 18 December 2021.

Bushman Art. KwaZulu-Natal Drakensberg South Africa. 2008. (Photographs by John Hone). (Durban, Johannesburg, and Cape Town: Produced by AP Art Publishers).

Caillods, F. and M. Denis. 2016. 'Social Science Challenges Inequalities: General Introduction'. *2016 World Social Science Report. Challenging Inequalities: Pathways to a Just World*. (Paris: United Nations Educational, Scientific and Cultural Organization.) https://www.unesco.org/open-access/terms-use-ccbysa-en. Accessed 14 April 2026.

Carruthers, J. 'Introduction', in S. Dovers, R. Edgecombe and B. Guest, eds., 2003. *South Africa's Environmental History. Cases and Comparisons*. (Athens: Ohio University Press and Cape Town: David Philip Publishers).

Castillo, J.A.Q. 2024. 'Editorial: Microhistory and Archaeology', in J.A.Q. Castillo, ed., *Open Archaeology.* Special Issue on microhistory and Archaeology, 10, 1–4. 20240006. https://doi.org/10.1515/opar-2024-0006. Accessed 23 April 2026.

Castrén, A-M., M. Lonkila and M. Peltonen, eds., (2004. 'Preface' in Castrén, A-M., M. Lonkila and M. Peltonen, eds., 2004. *Between Sociology and History. Essays on Microhistory, Collective Action, and Nation-building.* (Helsinki: Studia Historica 70, Finnish Literature Society). https://archive.org/details/betweensociology0000unse/page/17/mode/1up. Accessed 19 April 2026.

Cerutti, S. 2004. 'Social Relations Versus Cultural Models?', in Castrén, A-M., M. Lonkila and M. Peltonen, eds., *Between Sociology and History. Essays on Microhistory, Collective Action, and Nation-building.* (Helsinki: Studia Historica 70, Finnish Literature Society). https://archive.org/details/betweensociology0000unse/page/17/mode/1up. Accessed 19 April 2026.

Cloete, C.E. and R.A. Lubke. 1999. 'Flora of the Kap River Reserve, Eastern Cape, South Africa', *Bothalia*, 29 (1), 139–49.

Cock, J. 2018. *Writing the Ancestral River. A Biography of the Kowie*. (Johannesburg: Wits University Press).

Cohen, T.V. 2017. 'The Macrohistory of Microhistory', 18–42. ("Roundtable" transcript). https://profiles.laps.yorku.ca/publications/the-macrohistory-of-microhistory, Accessed 14 April 2026.

Dasmann, R.F. 1989. 'Toward a Biosphere Consciousness', in D. Worster, ed., 1989. *The Ends of the Earth. Perspectives on Environmental History.* (Cambridge, New York, Port Chester, Melbourne, Sydney: Cambridge University Press).

Davis, C., F. Engelbrecht, M. Tadross, P. Wolski and E.A. van Garderen. 'Future Climate Change over Southern Africa', in Mambo, J. and K. Faccer, eds., 2017. *Understanding the Social and Environmental Impacts of Global Change. South African Risk and Vulnerable Atlas*. Second edition. Department of Science and Technology, South Africa. (n.p.), African Sun Media.

Egmond, F. and P. Mason. 1977. *The Mammoth and the Mouse. Microhistory and Morphology*. (Baltimore and London, The Johns Hopkins University Press).

Engelbrecht, C. 2017. 'Micro-history of a Micro-estuary? Aspects of the Enviro-history of the Klein Palmiet Estuary in the Eastern Cape (South Africa)'. *Internet Archive*. https://archive.org/details/micro-history-or-micro-estuary/mode/1up, 1–25, Accessed 14 April 2026.

Engelbrecht, C. 2017. 'What is Neo-conservation?' *Internet Archive*. https://archive.org/. https://archive.org/details/what-is-neo/mode/1up, 1–4. Accessed 14 April 2026.

Engelbrecht, C. 2018. Book Review of *Writing the Ancestral River. A biography of the Kowie,* by Jacklyn Cock. (Johannesburg: Wits University Press, 2018, 193 pp. ISBN: 978-1-77614-187-6), *New Contree*, No. 81, December 2018, 180–97. in *Internet Archive*. https://archive.org/details/cock-kowie-river/mode/1up. Accessed 15 April 2026.

Engelbrecht, C. 2018. 'Micro-history, Enviro-history and Kleptocrats in South Africa'. *Internet Archive*. https://archive.org/details/micro-history-enviro-history-and-kleptoc/mode/1up, 1–14. Accessed 17 April 2026.

Engelbrecht, C. 2026. 'Microhistory: Paradox, and Invisibilisation', *Internet Archive*. https://archive.org/details/microhistory-paradox-invisibilisation-1-3/mode/1up, 1–57. Accessed 12 April 2026.

Everard, D.A. 'The Conservation Status of Some Unique Plant Species in the Eastern Cape.' (M.Sc. Department of Plant Sciences, Rhodes University, Grahamstown). https://www.bing.com/search?q=DA+Everard+The+conservation+status+of+some+plant+species+Rhodes+University&FORM=AWRE. Accesse 25 April 2016.

Franco, M.P.V. 2018. 'An Appraisal of Environmental Microhistory: Epistemological and Historiographical Insights', *Fronteiras*. Journal of Social, Technological and Environmental Science, 262–74. http://periodicos.unievangelica.edu.br/fronteiras/v.7,n3,set-dez.2018. DOI. http://dx.doi.org/10.21664/2238-8869.2018v7is.p262-274. ISSN 2238-8869. Accessed 12 April 2026.

Gaventa, J. and C. Runciman. 2016. 'Untangling Economic and Political Inequality:

the Case of South Africa', *2016 World Social Science Report. Challenging Inequalities: Pathways to a Just World.* Paris: United Nations Educational, Scientific and Cultural Organization. https://www.unesco.org/open-access/terms-use-ccbysa-en. Accessed 14 April 2026.

Ghobrial, J-P. 2014.'The Secret Life of Elias of Babylon and the Uses of Global Microhistory', *Past and Present*, 222, February, 52–93. https://archive.org/details/secretlifeofelia0000john/page/56/mode/lup. Accessed 25 December 2025.

Giralt, S., J. Klerkx, S. Riera, R. Julià, V. Lignier, C. Beck, M. De Batist and I Kalugin. 2002. *Recent Paleoenvironmental Evolution of Lake Issyk-Kul*. https://www.researchgate.net/publication/265064108_Recent_Paleoenvironmental_Evolution_of_Lake_IssykKul/citation/downloadhttps. Accessed 16 February 2020.

Gwinn, I. 2016. 'Going Back to Going Forward? A Reply to Hans Medick.' BEITAG aus: HISTORISCHE ANTROPOLOGIE, 24./2016. ISBN978-3-412-50540-0, ISSN 0-42-8704. BÖHLAU VERLAG GMBH and CIE, KÖLN WEIMAR WIEN. HISTORISCHE ANTROPOLOGIE. Kultur. Gesellschaft. Alltag. TEMA: Konflik. 24. Jahrgang 2016. Heft 3. Herausgegeben von Caroline Anri und Micha Suter. ELEKTRONISCHER SONDERDUCK. BÖHLAU VERLAG KÖLN WEIMAR WIEN.

Hempel, C.G. 1970. *Aspects of Scientific Explanation and Other Essays in the Philosophy of History.* (New York: The Free Press. A division of MacMillan Publishing Co., Inc., and London: Collier Macmillan Publishers). https://archive.org/details/ aspectsofscienti0000carl/page/n5/m3 April 2026.ode/1up. Accessed 23 April 2026.

Horkheimer, M. 1978. *Dawn and Decline. Notes 1926–1931 and 1950–1969.* Translated by M. Shaw, with an afterword by E. Gebhardt (New York: A Continuum Book, The Seabury Press).

Horkheimer, M. and T.W. Adorno. 2002. *Dialectic of Enlightenment. Philosophical Fragments*. Edited by G.S. Noerr and translated by E. Jephcott. (Stanford, California: Stanford University Press, 2002).

Horkheimer, M. 2004. *Eclipse of Reason*. Second edition. (New York: Oxford University Press).

Hughes, J. 1987. The Philosophy of Social Science. (London and New York: Longman).

Justino, P. and B. Martorano. 2016. 'Drivers and Dynamics of Inequalities Worldwide

(An Introduction to Part I). *2016 World Social Science Report. Challenging Inequalities: Pathways to a Just World*. Paris: United Nations Educational, Scientific and Cultural Organization. https://www.unesco.org/open-access/terms-use-ccbysa-en. Accessed 17 April 2026.

Kamau, J. 2013. Opinion. 'Wabenzi in the Land of Poverty and Opulence'. https://www.bing.com/ck/a?!andandp=aa2f7568d57dfa1f5a77d5b3c17f1fbab1988a5e1e15ccc20a0e4b77c16a10a9JmltdHM9MTc3NTk1MjAwMAandptn=3andver=2and hsh=4andfclid=37989906-6416-666a-11e8-8e3265d26735andpsq. Accessed 12 April 2026.

Keys, K. 1981. *The Hundredth Monkey*. (St. Mary, Kentucky: Vision Books).

Krepp, S. and A. Moreli. 2017. 'Defying Ideas and Structures: Writing Global History from Latin America', *World History Bulletin*, Vol. XXXIII, No.2, Special Section: The World from Latin America.

Landman, W.A., J. Malherbe and F. Engelbrecht. 2017. 'South Africa's Present-day Climate', in Mambo, J. and K. Faccer, eds., 2017. *Understanding the Social and Environmental Impacts of Global Change. South African Risk and Vulnerable Atlas*. Second edition. Department of Science and Technology, South Africa. (n.p.), African Sun Media.

Leach, M., J. Gaventa, P. Justino, F. Caillods and M. Denis. 2016. 'Challenging Inequalities: Pathways to a Just World', *2016 World Social Science Report. Challenging Inequalities: Pathways to a Just World.* Paris: United Nations Educational, Scientific and Cultural Organization, https://www.unesco.org/open-access/terms-use-ccbysa-en. Accessed 14 April 2026.

Lee, S., 2025. 'The Microhistorical Lens: Examining Historical Change. A Guide to Understanding the Complexities of Historical Events through Microhistory.' 24 May. Blog. *NumberAnalyticshttps*://www.numberanalytics.com/blog/microhistorical-lens-historical-change. Accessed 23 April 2026.

Magnússon, S.G. 2011. 'The Life of a Working-class Women: Selective Modernisation and Micro-history in Early 20th-century Iceland', *Scandinavian Journal of History*, Vol., 36 (2), 186–205. https://www.academia.edu/5195893/The_Life_of_a_Working_Class_Woman_selective_modernization_and_microhistory_in_early_20th_century_Iceland_Scandinavian_Journal_of_History_2011_?email_work_card=view-paper. Accessed 6 January 2020.

Magnússon, S.G. and D. Ólafsson. 2012. 'Minor Knowledge. Microhistory, Scribal Communities and the Importance of Institutional Structures', *Quaderni Storici*, 140, a. / XLVII, 2, agosto, 495–524. https://www.academia.edu/1970455/

Minor_knowledge.Microhistory_scribal communities_and_the_importance_of_ institutional_structures. Accessed 26 January 2002.

Magnússon, S.G. and I.M. Szijártó. 2013. *What is Microhistory? Theory and Practice.* (London and New York: Routledge).

Mambo, J. and K. Faccer, eds., 2017. *Understanding the Social and Environmental Impacts of Global Change. South African Risk and Vulnerable Atlas.* Second edition. Department of Science and Technology, South Africa. (n.p.): African Sun Media.

Mambo, J. 2017, 'Introduction', in J. Mambo and K. Faccer, eds., 2017. *Understanding the Social and Environmental Impacts of Global Change. South African Risk and Vulnerable Atlas*. Second edition. Department of Science and Technology, South Africa. (n.p.): African Sun Media.

Mambo, J. 2017. 'Risk and Vulnerability to Global Climate Change in South Africa', in Mambo, J. and K. Faccer, eds., 2017. *Understanding the Social and Environmental Impacts of Global Change. South African Risk and Vulnerable Atlas*. Second edition. Department of Science and Technology, South Africa. (n.p.): African Sun Media.

Marx, K. 1983. *Capital. A Critique of Political Economy.* Volume I. Book One. The Process of

Production of Capital. (Translated from the third German edition by Samuel Moore and Edward Aveling and edited by Frederick Engels.) (London: Lawrence and Wishart).

Maxwell, N. 1988. *From Knowledge to Wisdom. A Revolution in the Aims and Methods of Science.* Reprinted. (Oxford: Basil Blackwell Ltd).

Mills, A.J. 2017. 'Getting Down and Dirty. Microhistory from an Antihistory Perspective', *Workplace Review*, April. Special Issue. Thinking on the Edges of Management and Organizational History, 18–26.

Moore, J.W. 2015. *Capitalism in the Web of Life. Ecology and the Accumulation of Capital*. (London and New York: Verso).

Moore, J.W., ed., 2016. *Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism*. (Oakland: PM. Press).

Odum, E.P. and G.W. Barrett. 2010. *Fundamentals of Ecology*. (Thomson Books/Cole. Australia, Canada).

Osborn, E., B. Morgan, F.A. Jonsson. 2019. 'Syllabus: Climate Change: Disciplinary Challenges to the Humanities and the Social Sciences'. Neubauer Collegium for Culture and Society. (Chicago: The University of Chicago). https://neubauercollegium. uchicago.edu/faculty/climate_change. Accessed 15 November 2019.

Pandor, N. 'Minister's Preface', Mambo, J. and K. Faccer, eds., 2017. *Understanding the Social and Environmental Impacts of Global Change. South African Risk and Vulnerable Atlas.* Second edition. Department of Science and Technology, South Africa. (n.p.): African Sun Media.

Patel, R. and J.W. Moore. 2017. *A History of the World in Seven Cheap Things. A Guide to Capitalism, Mature, and the Future of the Planet*. (Oakland: University of California Press).

Rubinstein, D. and K. Sluis. 2008. 'A Life More Photographic; Mapping the Networked Image, in *Photographies*, 1(1), 9–28. DOI:10.1080/17540760701785842, https://www.researchgate.net/publication/299854265_A_Life_More_Photographic_Mapping The_Networked_Image.Accessed 14 April 2026.

Sigurðardóttir, S. 2025. 'Flash in a Moment of Danger. Icelandic Contemporary Photography (Memory and Microhistory)'. https://www.academia.edu/20544359/Flash_at_a_moment_of_Danger_Icelandic_contemporary_Photography.Memory_and_Microhistory_. Accessed 16 April 2026.

Simon, Z.B. 2013. 'Experience as the Invisible Drive of Historical Writing', *Journal of the Philosophy of History,* 7, 183–204.

Simon, Z.B. 2020. *The Epochal Event. Transformations in the Entangled Human, Technological, and Natural Worlds.* (Cham, Switzerland: Palgrave Macmillan).

Szijártó, I.M. 2018. 'The Paths of Microhistory', *Quaderna storici* 159 / a. LIII, n. 3,dicembre 917–27, DOI: 10. 1408/94603, https//www.rivisteweb.it/doi.10.1408/94603. Accessed 5 June 2020.

Szijártó, I.M. 2017. 'Probing the Limits of Microhistory', *Journal of Medieval and Early Modern Studies*, 47, 1, 193–8, https://doi.org/10.1215/10829636-3716638. Accessed 18 Oct. 2018.

Szijártó, I.M. 2002. 'Four Arguments for Microhistory'*, Rethinking History, MINIATURES, 6,*

2, 209–15, http://www.tandf.co.uk/journals. DOI: 10.1080/13642520210145644, accessed 24 January 2017.

Utterström, G. 1989. 'Climatic Fluctuations and Population Problems in Early Modern History', in D. Worster, ed., 1989. *The Ends of the Earth. Perspectives on Environmental History*. (Cambridge, New York, Port Chester, Melbourne, Sydney: Cambridge University Press).

Walters, T. 2019. 'Mega Climate Shocks for SA Biodiversity'. https://www.dailymaverick.

co.za/article/2019-10-11-mega-climate-shocks-for-sa-biodiversity-government-report/. Accessed 7 December 2019.

Williams, A., ed., 2020. 'UK's Attenborough says "Moment of Crisis" has come on Climate', in *Reuters Environment*, 16 January. https://www.reuters.com/article/us-climate-change-attenborough/uks-attenborough-says-moment-of-crisis-has-come-on-climate-idUSKBN1ZF1JA. Accessed 30 January 2020.

Worster, D. 1989. 'The Vulnerable Earth: Toward as Planetary History', 1–19, D. Worster, ed., 1989. *The Ends of the Earth. Perspectives on Environmental History*. (Port Chester, Melbourne, Sydney: Cambridge University Press).

Worster, D. 1989. Appendix: 'Doing Environmental History', in D. Worster, ed., 1989. *The Ends of the Earth. Perspectives on Environmental History*. (Cambridge, New York, Port Chester, Melbourne, Sydney: Cambridge University Press).

Ziervogel, G., M. New, E. A. van Garderen, G. Midgley, A. Taylor, R. Hamman, S. Stuart-Hill, J. Meyers and M. Warburton. 2014. 'Climate Change Impacts and Adaptation in South Africa', *WIREs Climate Change*. Doi: 10.1002/wcc.295. https://onlinelibrary.wiley.com/doi/full/10.1002/wcc.295. Accessed 1 March 2020.